



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,721	01/27/2000	James W. Cree	31358-233	8978 .

7590 01/16/2002

P. Weston Musselman, Jr.
Jenkins and Gilchrist, P.C.
3200 Fountain Place
1445 Ross Ave.
Dallas, TX 75202

EXAMINER

PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 01/16/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-7

Office Action Summary	Application No.	Applicant(s)	
	09/491,721	CREE ET AL.	
	Examiner	Art Unit	
	Jeremy R. Pierce	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 18-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Claims 1-17 in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7 and 8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Applicant claims a metallocene-based low density polyethylene film that is elastic. To the Examiner's knowledge, polyethylene film is non-elastic. Does the Applicant mean the film layer in this invention to be extensible rather than elastic? If the Applicant desires the film layer to be elastic, then how is the polyethylene film layer made elastic?

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 7-17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haffner et al. (U.S. Patent No. 5,789,065).

Haffner et al. teach a composite material formed of an elastomeric film sandwiched by a pair of nonwoven unnecked fabric layers with good elasticity in the cross-machine direction (column 2, lines 15-56). The nonwoven fabric layers can be elongated 20 to 200% of their original length because the composite (two nonwoven layers with a film) is elastic, and Haffner et al. define elastic as being able to stretch at least 160% (column 5, lines 31-37). The property of ultimate force to break the fabric in the transverse direction would be inherent to the composite provided by Haffner et al. since the chemical and structural limitations of the invention are met. With regard to claims 2 and 3, Haffner et al. disclose that the fibers in the nonwoven layers can be laid in a random direction or at an angle from 0 to 75 degrees with respect to the machine direction (column 9, lines 20-34). With regard to claim 5, Haffner et al. teach using

polyolefin fibers in the nonwoven layers (column 8, lines 61-65). With regard to claim 6, Haffner et al. teach the nonwoven layers to weigh between 3.4 and 400 grams per square meter (column 6, line 25). With regard to claims 7-10, Haffner et al. teach the elastic film can be made from block copolymers or metallocene-based ethylene copolymers (column 6, lines 49-62). With regard to claims 11 and 13, characteristics of the composite would be inherent once the limitations of the layers that form the composite are met. With regard to claim 12, Haffner et al. disclose perforating the film to obtain breathability in the laminate (column 13, lines 5-7). With regard to claim 14, Haffner et al. disclose using adhesive to bond the layers (column 12, line 8), but does not disclose the amount used. It would have been obvious to one skilled in the art to use to make the bonded surface area at least 3.0% between the layers in order to form a substantial bond between the layers. With regard to claims 15-17, Haffner et al. teach the fabric layers can be multilayer (column 6, lines 11-12) and the elastic film can be multilayer (column 10, lines 63-64).

7. Claims 1, 2, 5, 6, 11, 13, and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative under 35 U.S.C. 103(a) as being obvious over Austin et al. (U.S. Patent No. 5,543,206).

Austin et al. disclose a composite nonwoven fabric with a superior combination of tensile properties and abrasion resistance (column 1, lines 49-50). A nonelastic layer of nonwoven with a fabric elongation between 70 and 300 percent (column 5, line 60) is bonded to an extensible polyolefin film (column 2, lines 15-17). An additional nonwoven fabric, similar to the first nonwoven fabric, is bonded to the opposite side of the film

Art Unit: 1771

forming a three layer composite (column 5, lines 21-30). Austin et al. do not disclose the nonwoven fabric layers to have an ultimate force to break of greater than 1500 g/in. However, looking at Table 1, Austin et al. do disclose the mechanical properties of the nonwoven fabrics used in the composite. The 50/50 polypropylene and polyethylene fabric has a cross-machine direction elongation of 145%, which falls within the limitations of claim 1. The nonwoven also has a cross-machine direction tensile strength of 1054 g/in (converted from 415 g/cm), which does not fall within the limitations of claim 1. However, all compositional and structural limitations of the claim are met. It would have been obvious to one skilled in the art to increase the tensile strength of the nonwoven fabric in the cross-machine direction in order to make the fabric with more tensile strength and abrasion resistance. With regard to the composite laminate having an elongation value greater than the elongation values of the first and second nonwoven layers and the tensile strength being greater than 3000 g/in., those characteristics of the composite would be inherent once the limitations of the individual layers are met. With regard to claims 2 and 5, the nonwoven fabric may be made in a random arrangement (column 3, line 16). With regard to claim 6, Austin et al. disclose the nonwoven fabric layers to weigh 25 grams per square meter. With regard to claims 11 and 13, characteristics of the composite would be inherent once the limitations of the layers that form the composite are met. With regard to claim 14, either a continuous or discontinuous coating of adhesive can be used to bond the layers.

Claim Rejections - 35 USC § 103

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haffner et al. or Austin et al. in view of Shiba et al. (U.S. Patent No. 4,804,378).

Haffner et al. and Austin et al. fail to disclose a particular denier for the fibers that form the nonwoven fabric layers. Shiba et al. teach an absorbent article useful in a sanitary napkin or disposable diaper (column 1, lines 4-8). Shiba et al. disclose that nonwoven fabrics useful in such products are composed of fibers with a denier range of 1.5 to 6 (column 5, lines 51-65). It would have been obvious to one skilled in the art to use fibers with a denier of at least 1.5 in the nonwoven fabric layer of Haffner et al. or Austin et al. in order to obtain a nonwoven fabric layer with a desired feel, as taught by Shiba et al.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 6,001,460 to Morman et al., U.S. Patent No. 6,096,668 to Abuto et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers

Art Unit: 1771

for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jeremy R. Pierce
Examiner
Art Unit 1771

January 14, 2002



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700